Herbal Formulation

For the Practicing Herbalist

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Introduction

Formulation is a key aspect of herbal medicine. Knowing how to put the various plants and other ingredients together is an important facet for the practicing herbalist.

Formulation can seem complicated and intimidating, especially for the beginner herbalist, as there are many varying variables and possible formulations for each situation. It is a skill acquired with time, practice, and experience. It is a clinical skill based on assessing an individual patient's needs and an understanding of the properties of individual plants and how they fit together.

Formula Considerations

1. For each individual, there are many possible formulations
   - Trying to find the 'perfect' formula can stymie the novice herbalist. There is no one perfect formula.
   - Formulation is an ongoing process; the plants and proportions may need to be adjusted as symptoms change.
   - It can be easy to add many different plants into a formula, each addressing a different part of a person's health. But having too many can dilute the strength of the formula's principal plants. This can potentially create a less effective medicine, as well as making it difficult to continually prepare the formula.
2. Formulas are not often given in isolation, but may be one of a number of medicines prepared by yourself or other practitioners. Knowing these other medicines may alter the formula or the way it is taken.
3. During a consultation, it is helpful to keep a list of the herbs and preparations on hand as a reminder of what you have available.
4. Acquire a variety of references and resources to consult.
5. Network with other clinicians, researchers, and peers, and have a list of people willing to answer questions about individual patients and conditions.
6. During the course of an intake, write down plants that come to mind. While you may not eventually use them, they could be a useful consideration.
7. There are some differences in formulating for chronic and first aid conditions.
   - In first aid, the formula is usually given for a limited time until the current condition is resolved.
   - In formulating for chronic conditions, the medicines may be taken for an extended time. And while they may focus on reducing symptoms, they often also support overall health.
8. What aspect of an individual's health is the formula focused on?

- Physical, emotional, constitutional, or other?
- Is it for an acute or chronic condition?
- Which problems need to be addressed immediately? Which areas can wait?

9. Is the formula balanced?
    - Do the plants in the formula complement each other, such as function, symptom reduction, disease modification, flavor, or other aspects?
10. Can the formula be duplicated elsewhere?
    - This is especially important if the patient will be moving or traveling for long periods, during which they will need refills.
11. Do you have the amounts and parts of each herb written down so you can duplicate the formula at a later time?
12. If the patient is taking medication, consider the impact of the plants in the formula and how they may affect the medications.

Specific Attributes

When choosing individual plants for a formula, it is helpful to know their basic attributes.

1. The medicinal properties and effects of a specific plant.
2. The therapeutic categories the plants fit into.
3. How well they combine with other plants.
    - Will they enhance or dilute the effectiveness of other plants in the formula?
4. Their compliance potential
    - How likely is it that the patient will take it in the way you suggest?

Preparing Individual Formulas

When preparing a formula and throughout treatment, it is important to consider these three aspects. These factors also revolve around patient compliance.

Over time, a formula may need to be adjusted as the patient's health shifts. The proportion of individual plants may need to be altered, or plants may need to be removed and/or other plants added.

The individual herbs may also need to be reconsidered if you are not using plants from the same original source. This possible variation of a plant's potency may lead to altering the proportion or the individual plants in a formula.

Try to keep the formulas from becoming overly complicated. These can be hard to recreate or for the patient to find elsewhere.

1. **Dosage**
    - How often (frequency) will they be taking each medicine?
    - How much (quantity) of a specific medicine will the patient be taking?
    - Knowing these aspects helps the practitioner decide which plants to include and the proportions of each for the formula.
    - Will they be taking the medicine on a specified schedule, as needed, or both?
    - Will there be times when they should alter their quantity or frequency (i.e., before sleep)?

2. **Specific herbs**
    - Which specific plants will be included in the formula?
    - This may be decided by the medicines and plants you have on hand.
3. **Proportion**
    - How much of each of the specific plants are used in the formula?
    - The strength of each individual plant will be one of the determining factors for their proportion in the formula.
    - If using multiple plants, is there enough of any individual plant for its effects to be carried through?

Patient Compliance

1. Patient compliance is a fundamental aspect when deciding which medicines and preparations are appropriate for a specific patient.
2. The basic question is: will the patient take the medicine?
    - Let them know what type and how many preparations you are preparing for them, and how often you think they should take it.
    - From their response, make an honest evaluation of the likelihood that they will take them in the way you suggest.
    - Hesitancy may imply they are unsure if they can take the medicine(s).
    - If they are reluctant to take the medicines, discuss other ways to make it easier for them to take them. This could involve flavor, the amount of preparations or how often they will take the medicines.
    - The bottom line is that the medicine will be ineffective if the patient does not take it.
3. Different preparations have different qualities and drawbacks.
    - Tea can take a while to prepare, clean up, and it needs equipment.
    - Compresses can be messy and difficult to apply on oneself.
    - Oils can be messy to apply and stain clothing.
    - Tinctures contain alcohol, which some people may not drink.
4. There are numerous reasons people will not take the medicines. These are important considerations when preparing them.
    - Flavor is important, as many plants are strong tasting.
    - Confused about how to prepare the medicine.
    - Unsure of dosage or regimen.
    - They may not feel they have the time to take the medicine throughout the day.
    - They may not feel it is helping.
    - As symptoms lessen, they may cut down or stop taking a formula meant for long-term use.
    - Interest may wane.
    - The medicines may be unaffordable.
    - It may be difficult to find or access the medicine
5. Affordability
    - Be frank in letting patients know how much money the medicine will cost beforehand and how long they may need to take it.

- People may be surprised by how long a medicine should be taken.
- For patients willing to make their own medicine, you can offer suggestions on how to go about it. You can give them resources on where quality plants can be purchased in bulk and strategies on how to prepare them.

Triangulation Formulation

1. This is one approach to setting up a formula. It should be used as a guideline rather than a firm rule.
2. This type of formulation is prepared along three points, each point representing a category of herbal medicine.
3. More than one plant can be a part of any point.

Categories of Herbs

Principal/Main Herb

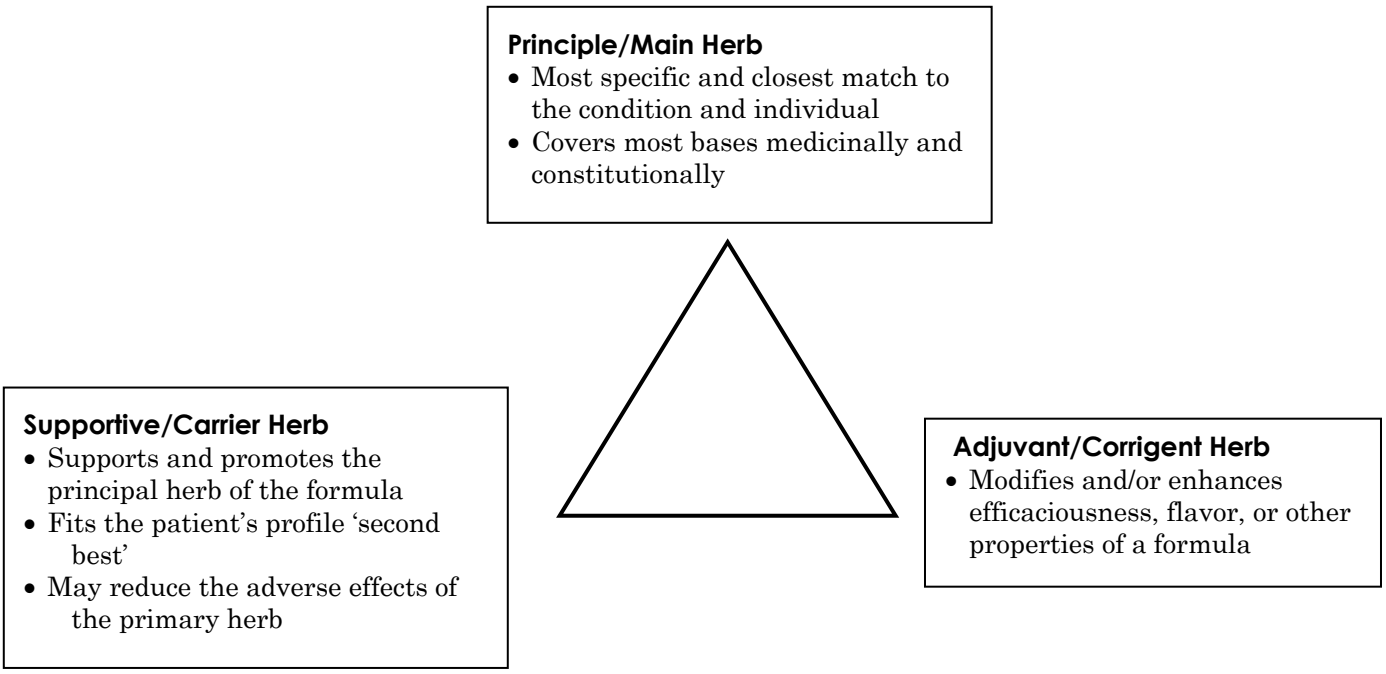
1. This is the plant that most closely matches the patient's specific and overall health needs, physiologically, pharmacologically, and constitutionally.
2. While it is the main plant, it does not mean that it needs to occupy the most space in a formula. For instance, it may be a strong herb and should be taken in smaller doses, and needs to be diluted with other plants in the formula.
3. In essence, this is the primary herb, the one most important and best matched for the patient and situation.

Supportive/Carrier Herb

1. These plants have several activities in the formula.
2. They help facilitate the activity of the principal herb.
3. While these plants are of secondary importance, they are generally an integral part of the formula.
4. They help support and/or modify the formula.
5. They may help the formula by improving the uptake, activity, absorption, and bioavailability of the plants in the formula.
6. They may help mitigate unwanted side effects.

Adjuvant/Corrigent Herbs

1. Adjuvants are plants that modify or enhance a medicine's activity.
2. Corrigents are flavoring agents.
3. This category is used to balance the formula or add other modifying activities.
4. The difference between this category and supportive herbs is that supportive herbs are often more primary to the formula, while these are primarily meant to increase the efficiency of the formula or make it more palatable.



Preparing a Formula by Parts

One of the more complicated aspects of preparing a formula is figuring out how much of each ingredient is needed when given the parts, rather than the amounts, of a formula.
Below is one method that can be applied to dry or liquid medicines in both the metric and US standard systems.

One needs to know the final weight or volume of the formula and how many parts of each individual plant. Below are some explanatory examples.

Measurements-Converting US Standard to Metric
It is important to stay within the same system for each medicine. These are approximate values, but will usually suffice for preparing formulas.
Abbreviations-Milliliter (ml), gram (gm), ounce (oz).

- 1 oz= 30 ml/30 gm
- 2 oz=60 oz/60 gm
- 4 oz=120 ml/120 gm
- 8 oz=240ml/240 gm

Example 1 *Metric*

120 ml (4 oz) Tincture

- Jamaican dogwood (Piscidia piscipula) 5 parts
- Hops (Humulus lupulus) 4 parts
- Blue vervain (Verbena hastata) 2 parts
- Tulsi (Ocimum tenuiflorum) 1 part

1. **Add up all the parts** to determine the number of parts in the formula
   - 5+4+2+1=12

2. **Divide the size of the formula** by the total parts in the formula
   - There are 12 parts going into a 120 ml bottle.
   - 120 ÷12 =10

3. **Multiply each ingredient by the above number.** This will determine the total milliliters needed of each ingredient
   - Jamaican dogwood 5 parts x 10 = 50 ml
   - Hops 4 parts x 10 = 40 ml
   - Blue vervain 2 parts x 10 = 20 ml
   - Tulsi 1 part x 10 = 10 ml
   - When added up, all the parts should equal the size of the bottle
   - 50+40+20+10 = 120

4. **Measure and pour the tincture.**

Example 2 *US Standard*

Tea 5 oz

- Catnip (Nepeta cataria) 5 parts
- Meadowsweet (Filipendula ulmaria) 4 parts
- Chamomile (Matricaria chamomilla) 4 parts
- Marshmallow leaf (Althaea officinalis) 3 parts
- Licorice (Glycyrrhiza uralensis) 1 part

1. Add up all the parts
   - 5+4+4+3+1=17 parts
2. Divide the final weight by the parts
   - 5 (oz) ÷ 17 (parts) = 0.294 (round up to .3)
3. Multiply each ingredient by the above number
   - Catnip 5 parts x .3 = 1.5 oz
   - Meadowsweet 4 parts x .3 = 1.2 oz
   - Chamomile 4 parts x .3 = 1.2 oz
   - Marshmallow leaf 3 parts x .3 = .9 oz
   - Licorice 1 part x .3 = .3 oz
4. 1.5+1.2+1.2+.9+.3 = 5.1 oz

Therapeutic Categories Considerations

1. When deciding which specific plants to include in a formula, it is helpful to know the therapeutic categories for each plant.
2. Instead of considering just a single plant for a health condition, consider the category that would best treat the condition.
3. This opens up an array of choices rather than relying on a single plant.
4. This helps remove constraining factors, such as not having a specific plant available.

5. This also opens the possibility of other plants that might be more specific for the situation.
6. For example, instead of relying on Chamomile for stomach cramps, you could look under the category of antispasmodics (plants that help with cramps) and have a subcategory of digestive antispasmodics.
    - Under digestive antispasmodics, besides Chamomile, you might also have Fennel, Wild yam, Catnip, and Meadowsweet.

Therapeutic Categories

There are many ways to organize therapeutic categories, and each herbalist will have their own set of categories and subcategories, as well as the plants associated with them. It is helpful to order these lists in a way that makes sense to the individual. It is useful to have this type of list on hand when preparing formulas as a reminder. Below are two examples of categories with subcategories and associated plants. Note that there can be subcategories within larger subcategory headings. For instance, 'Migraine' under 'Headache' under the 'Pain' category. While making these types of lists can be complicated, they can be helpful in determining specific plants for an individual. For instance, Kava is a sedative, skeletal muscle relaxant, and pain medicine. So it might not be suitable where alertness is required, but it might be helpful as a sleep aid.
In the below list of 'Therapeutic Categories', I have added just a few subcategories per category; these can be added to, altered, or eliminated as per the individual herbalist's disposition.

Antimicrobial

Antibacterial	**Antifungal**	**Antiprotozoal**	**Antiseptic**	**Antiviral**
Yarrow	Chaparral	Barberry	Yarrow	Yarrow
Barberry	Propolis	Chaparro amargosa	Myrrh	Garlic
Myrrh	Cedar	Quassia	Witch hazel	Baptisia
Oregon graperoot			Chaparral	Oregon graperoot
Chaparral			Propolis	Boneset

Pain

Antispasmodic	**General**	**Headache**	**Sedative**	**Skeletal Muscle**
Crampbark	Jamaican dogwood	Feverfew	Valerian	Black cohosh
Black haw	Valerian	Basil	Hops	Pedicularis
Silk tassel	Hops	Lobelia	Skullcap	Jamaican dogwood
Valerian			Kava	Skullcap
Wild yam				Kava

Therapeutic Categories List

1. **Adjuvant**
2. **Antimicrobial**
   - Antibacterial
   - Antifungal
   - Antiprotozoal
   - Antiseptic
   - Antiviral
3. **Cardiovascular System**
   - Cardiac tonics
   - Hypertension
   - Lipids
   - Vascular tonics
4. **Chronic Disease**
   - Asthma
   - Arthritis
   - Autoimmune
   - Cancer
   - Congenital
   - Diabetes
   - Fibromyalgia
   - Heart disease
   - Injury
5. **Corrigent**
   - Aromatic
   - Demulcent
   - Spicy
6. **Digestive System**
   - Antispasmodic
   - GERD
   - IBD
   - IBS
   - GI tonic
7. **General Health**
   - Fatigue/Malaise
   - Idiosyncratic
8. **Immune System**
   - Allergies
   - Autoimmune
     - Rheumatoid arthritis
   - Lymphatic
   - Immune tonic
9. **Infections**
   - Acute infection
   - Antimicrobial
     - Influenza/Colds
   - Chronic infection
     - Lyme
10. **Mental Health**
    - Substance use disorder
    - Anxiolytic
    - Cognitive function
    - Depression
    - Sleep
    - Trauma
11. **Pain**
    - Acute
    - Anti-inflammatory
    - Antispasmodic
    - Chronic
    - General pain
    - Headache
    - Skeletal muscle relaxant
12. **Reproductive/Hormonal**
    - Female reproductive
      - Menopause
      - PCOS
    - Male reproductive
      - Prostate
    - Trans health
13. **Respiratory System**
    - Asthma
    - Bronchitis
    - COPD
    - Infection-Sinus
    - Respiratory tonics
14. **Skeletal Muscle**
    - Antiinflammatory
    - Skeletal muscle relaxant
15. **Skin**
    - Allergy
    - Rash
16. **Wound Healing**
    - Connective tissue
    - Vulnerary